STAFF MEMO

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NO. 11 | 2023

CHRISTIAN
BJØRLAND

NORGES BANK

ISSN 1504-2596 (online only)
ISBN 978-82-8379-279-9 (online only)

CRE firms' refinancing and cash flows at a time of high inflation*

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Norges Bank, Financial stability

May 2023

Abstract

Norwegian banks have substantial exposures to commercial real estate (CRE), and developments in the industry are important for financial stability. Higher financing costs, falling CRE prices and a large amount of bond debt maturing in the coming years have increased the refinancing risk associated with CRE over the past year. We use a broad set of data sources to assess CRE firms' refinancing risk and their capacity to absorb higher financing costs. The strong growth in CRE firms' bond debt over the past decade has contributed to spreading risk from banks to other financial operators. At the same time, bond debt can be a less stable funding source than bank debt in turbulent times. We find that banks have modest exposures to CRE groups with elevated refinancing risk in the bond market and those with the weakest financial strength. The rapid rise in rents over the past few years and CPI-indexing of office leases make many CRE firms robust against higher interest rates and credit premiums. In the event of an economic downturn, however, developments in renteal income may fall.

Keywords: Financial stability, commercial real estate (CRE), banks' credit risk

*The views and conclusions in this publication are the author's own and are not necessarily shared by Norges Bank. They must therefore not be reported as Norges Bank's views. I would like to thank Henrik Andersen, Martin Bjørlo, Henrik Borchgrevink, Marius Hagen, Ida Nervik Hjelseth, Torbjørn Hægeland, Sverre Mæhlum and Per Marius Pettersen for useful comments and input. Thanks to Vetle Magnussen Andreassen, Celine Strand Kvisselien and Joakim Myhre Rolfsøn for student assistance. Corresponding author: Christian Bjørland, christian.bjorland@norges-bank.no.

1 Introduction

Developments in CRE are of considerable significance to financial stability. Loans to CRE account for almost half of loans to firms from Norwegian banks. Historically, banks' losses on loans to the industry have been substantial during financial crises. Banks lost about one-third of their lending to the industry during the banking crisis in 1988-1993 (see Andersen (2023)).

Higher interest rates and higher credit premiums over the past year have resulted in a pronounced increase in financing costs for CRE firms. Firms in this industry have high debt relative to earnings, and profitability is therefore vulnerable to higher financing costs. CRE prices have fallen since summer of 2022, after rising sharply since the 2008-2009 financial crisis. Lower prices will weaken the financial strength of CRE firms. A lower property value will also provide less room for borrowing for a given equity requirement.

Most of CRE firms debt consists of bank loans, but bond debt has become an increasingly important source of funding for the industry. Since summer 2022, credit premiums on CRE firms' bond funding have been high by historical standards, and the volume of issuance has been low. In connection with the financial market turbulence in March 2023, credit premiums in the bond market rose further. In the years ahead, much of the CRE's bond debt matures, and the financing cost for new loans will then probably be considerably higher than at the time of issue. Some CRE firms may find it difficult to raise new bond debt in the market, while falling property prices and weaker profitability may make obtaining debt bank loans more demanding. This could drive fire sales of properties, which in turn could weaken market prices.

In this paper, we assess CRE firms' refinancing risk and ability to meet higher financing costs. We look in particular at refinancing risk associated with bond debt. Section 2 describes the data used in the analysis. Section 3 briefly discusses the outlook for banks' willingness to lend to CRE firms. Section 4 discusses drivers of the sharp growth in bond funding over the past decade and consequences this may have for financial stability. This Section also discusses the refinancing risk associated with bond debt. The capacity of CRE firms to meet increased financing costs with ongoing profitability is assessed in Section 5. Section 6 concludes.

2 Data

2.1 Data on CRE firms' debt financing

The company Stamdata [1] provides information on all securities issued by Norwegian firms registered in the Norwegian Central Securities Depository. This provides us with an overview of the vast majority of outstanding bond debt for Norwegian CRE firms. The data is at the ISIN level and provides, among other things, an overview of maturity dates, outstanding debt and interest terms. We use this information to identify CRE firms' refinancing risk associated with maturity of bond debt. The data extraction from Stamdata was done on 3 January 2023. The company Nordic Bond Pricing provides us with information on credit premiums for Nordic bonds, and Thomson Reuters provides us with information on swap rates.

Finanstilsynet's exposure database (ENGA) provides information at firm level on all Norwegian banks' loans to non-financial corporations. We use data reported by banks as of 31 December 2021. The exposure database provides, among other things, information about the size of the loan.

We have limited information on maturities and lending conditions related to CRE firms' bank debt. Most of our information basis consists of aggregate credit variables from Statistics Norway and surveys conducted by Norges Bank and market participants. Since 2010, the company Union has conducted quarterly surveys of the seven largest CRE lending banks in Norway. This survey provides, among other things, information about lending margins on new loans. We also use information from Norges Bank's survey of bank lending, which is a qualitative survey of banks' credit standards and their assessment of credit demand. The ten largest banks in the Norwegian credit market participate in the lending survey.

We use information from Statistics Norway (SSB) on developments in total credit growth to

[1] Stamdata is a provider of data on Nordic bond debt.

2.2 Data on CRE firms' financial position and on the rental market

We mainly use annual accounts figures at group level from Dun Bradstreet to obtain information on the financial situation of CRE firms. Because debt and earnings are split into many firms with complex group structures, it is appropriate to look at financial statements showing the groups as a whole in analyses at firm level. We also use information from the quarterly reports of listed CRE firms. However, few Norwegian CRE firms are listed on the stock exchange, and they own less than 10 percent of all CRE in Norway (Bjørland et al, 2022). The annual accounts are therefore the most up-to-date accounting data for the vast majority of firms. 2021 is the last year from which we have available consolidated accounts figures for a large number of CRE firms.

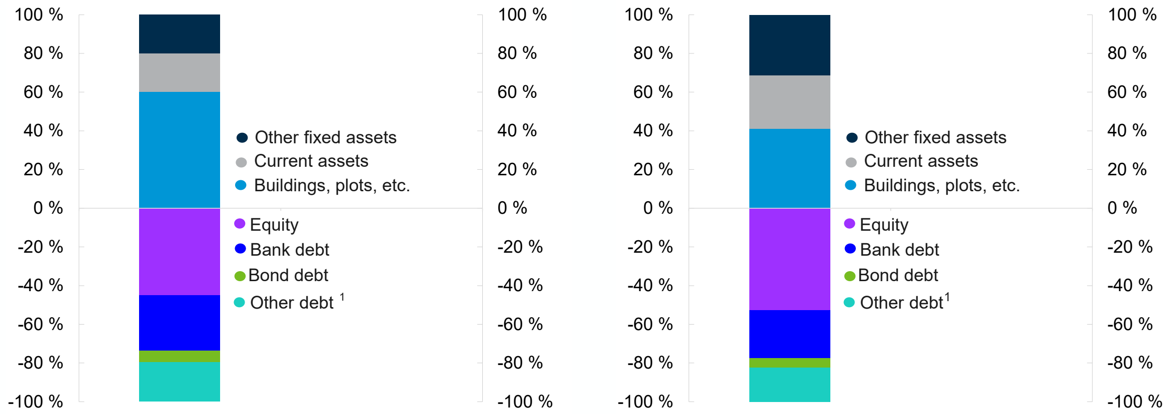
We obtain information about the office rental market from the company Arealstatistikk. Among other things, the data provides information on developments in the average maturity of signed leases and developments in average market rents at quarterly frequency.

3 Bank debt

CRE firms as a whole have more bank and bond debt, hereafter referred to as interest-bearing debt, relative to equity than other non-financial firms (Chart 1). A higher leverage ratio for CRE firms may be due to the industry being capital-intensive, while real estate is suitable collateral. At the end of 2021, bank loans accounted for just over 80 percent of the interest-bearing debt of CRE firms.

Figure 1: The balance sheet of Norwegian groups in 2021

(a) Commercial real estate (b) Other non-financial corporations

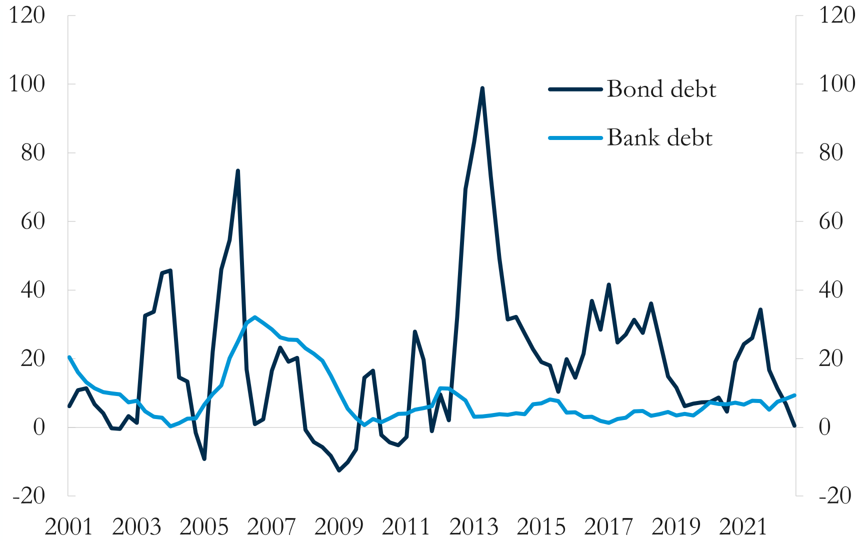


1.) Other liabilities include accounts payable and deferred tax

Sources: Dun & Bradstreet and Norges Bank

Bank loans have historically been a fairly stable source of funding for the industry. Even during the financial crisis in 2008-2009, when CRE prices fell sharply, growth in banks' CRE lending remained positive (Figure 2). The results of Norges Bank's survey of bank lending since 2008 indicate that there have been few and short periods when banks have tightened credit standards for CRE firms.

Figure 2: Four-quarter growth in C2 (domestic credit) for CRE firms from different credit sources. Percent



Source: Statistics Norway

Norwegian banks' lending capacity is solid,[2] but a weaker market outlook may reduce banks' willingness to lend to CRE firms. CRE prices have fallen since summer 2022 and Norges Bank expects a further fall in prices ahead (see Norges Bank (2023)). Banks have reported somewhat higher CRE losses over the past six months, but losses are still at fairly low levels from a historical perspective. Over the past three quarters, banks in Norges Bank's lending survey have reported somewhat tighter credit standards for the industry. Several banks in the lending survey have pointed to higher interest rates and the risk of a fall in prices as reasons for the tightening.

Nordic branches account for a large share of banks' CRE lending. Loans from Handelsbanken, Nordea and Danske Bank account for almost 40 percent of bank loans to Norwegian CRE firms. In crises that are isolated to Norway, branches can make a positive contribution to maintaining total credit supply in Norway, while in international crises they can make a negative contribution (see Turtveit (2017)). Over the past year, Sveriges Riksbank and a number of market participants have pointed to increased risk at Swedish CRE firms (see box "Bond debt of Swedish CRE firms"

[2] See Norges Bank (2023) for an assessment of Norwegian banks' financial strength and profitability.

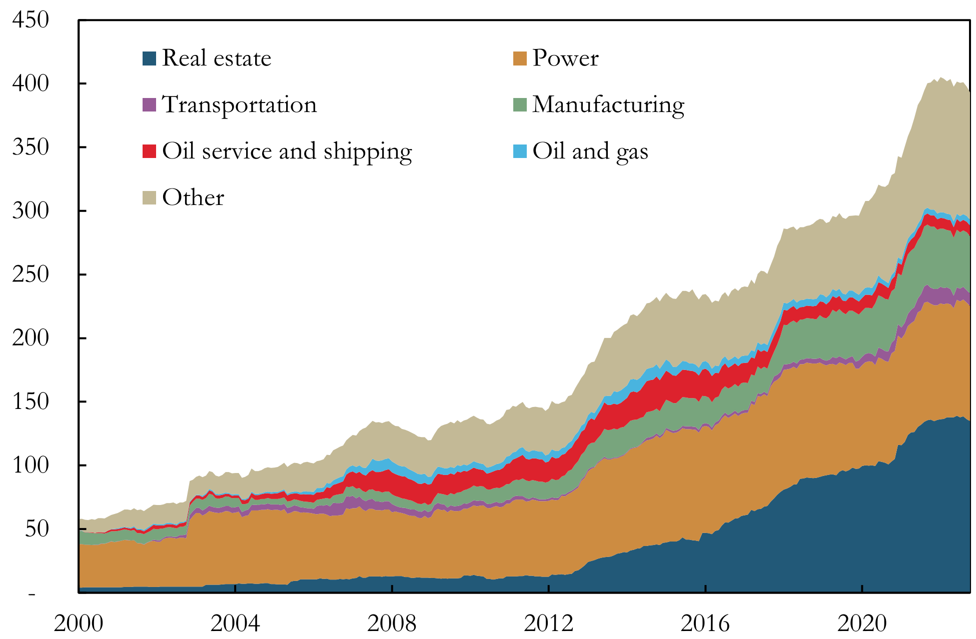
below).

4 Bond debt

4.1 Drivers of strong growth in bond debt and implications for financial stability

Over the past decade, CRE firms have substantially increased their bond funding in NOK. The total outstanding volume of Norwegian bonds[3] has increased from just over NOK 10 billion from 2012 to almost NOK 140 billion at the end of 2022 (Figure 3). CRE is now the largest industry in the Norwegian bond market, measured in outstanding volume. Growth in bond debt has been very high in periods (figure 2). This is partly because the volume of bond debt started off at a low level.

Figure 3: Bond debt in Norwegian non-financial corporations by industry. NOK billion

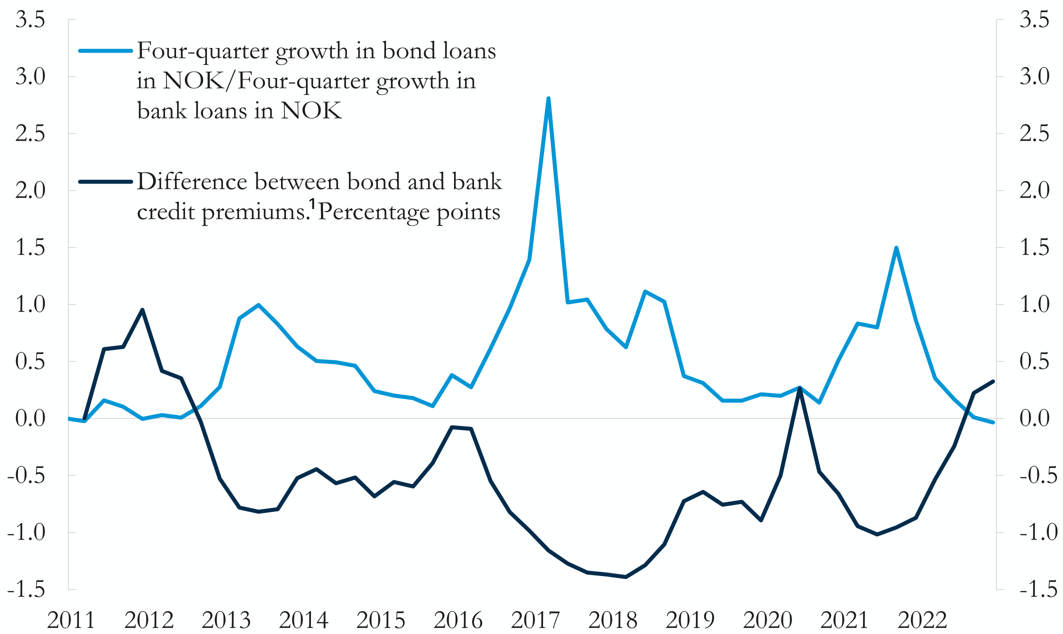


Source: Stamdata

[3]Bond debt issued with Norwegian loan documentation with a Norwegian ISIN number. Norwegian bond debt is normally registered with VPS.

A fall in the cost of bond funding relative to the cost of bank funding is probably an important reason for the sharp growth in CRE bond debt. We explore this relationship by calculating a time series for the difference between premiums on new bond and bank loans with low credit risk (see Appendix A.1 for details). Changes in the differences between these premiums can be interpreted as a change in the price of bond funding relative to bank funding. Periods when bond premiums have fallen relative to bank premiums have coincided with high growth in bond debt relative to bank debt (figure 4). This may indicate that CRE firms place considerable emphasis on financing costs when choosing between bank and bond funding.

Figure 4: Evolution of credit premiums and growth in bond and bank funding



1.) The credit premiums are calculated for new five-year loans with low credit risk. Percentage points above three-month Nibor

Sources: Nordic Bond Pricing, Statistics Norway, Union and Norges Bank

There are several possible reasons for differences in movements in premiums and growth in bond and bank funding. Credit premiums mainly reflect the credit risk of the bond loan, but increased demand from investors can contribute to lower premiums. The years following the financial crisis have been characterised by low interest rates, quantitative easing by a number of central banks and increased risk-taking. This may have fuelled demand for real estate bonds, which have a higher return than the safest securities. Life insurance companies, which have invested a large proportion of their portfolios in bonds, have increased their exposure to real estate bonds in recent years.

Stricter capital requirements may have pushed up the cost of bank loans relative to bonds for loans with longer maturities. Union surveys indicate that since 2010, the average maturity of the largest banks' CRE loans has fallen from just under 6 years to about 3 years. In comparison, the maturity of bonds issued in recent years has typically been between 5 and 7 years. The risk weights in the capital requirement for IRB banks increase with the maturity of the loan, and this may have contributed to increasing the cost of longer-term corporate loans. In the case of a typical CRE loan for a bank using the IRB approach, we estimate that the risk weight rises by about 40 percent if the maturity increases from 3 years to 6 years.

From a financial stability perspective, it is positive that the credit risk associated with CRE investments spreads from the banking sector to a broader set of investors. Life insurance companies are among the investors that have increased their exposure to CRE in recent years (see Norges Bank (2023)). Moreover, increased use of bond funding may give CRE firms access to cheaper funding.

In turbulent times, however, bond funding may be a less stable source of credit than bank funding. Growth in CRE firms' bank financing has historically been appreciably more stable than bond funding (figure 2). The lending margin on banks' corporate loans has also been more stable than credit premiums in the bond market (see Hagen et al (2023)).[4]

[4] The analysis also notes that stable developments in banks' lending margins may be driven by banks' giving priority to loans with lower credit risk in uncertain times, thus changing the composition of the loans.

4.2 The financial situation of bond-issuing firms

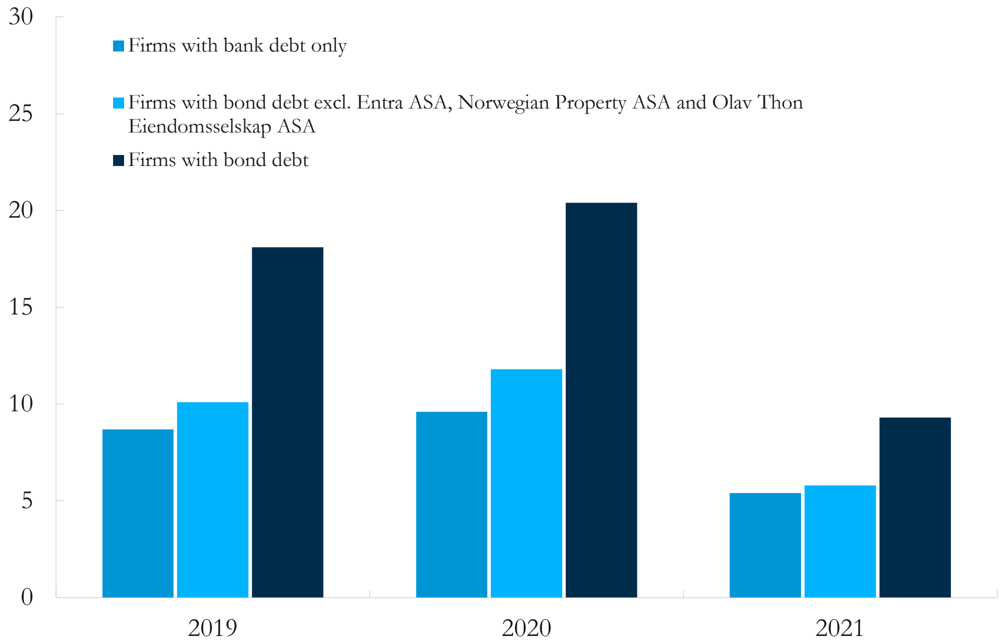
A large share of the bond debt is concentrated in a small number of participants with a high credit rating,[5] while a high share of issuers with a low credit rating can be observed. Entra ASA, Olav Thon Eiendomsselskap ASA and Norwegian Property ASA, all of which have a high credit rating, account for 31 percent of outstanding bond debt. The remaining 69 percent is distributed among 154 issuers, and about three-quarters of this debt is held by firms with a low credit rating.

Bond-issuing CRE firms generally have a higher debt burden[6] than non-bond-issuing firms (with only bank loans) (figure 5). Given solid profitability in the industry in 2021, the debt burden of many firms was low that year. The increase in the debt burden of bond-issuing CRE firms reflects both a lower return on equity and a higher debt ratio for these firms. Entra ASA, Norwegian Property ASA and Thon Eiendom ASA dominate the key figures for bond-issuing firms. If these three firms are excluded when calculating the key figures, the debt burden rises markedly.

[5] High and low credit ratings refer to firms with investment grade and high yield ratings in the bond market, respectively.

[6] Debt burden is here defined here as net interest-bearing debt in relation to profit before tax. Net interest-bearing liabilities are interest-bearing debt minus bank deposits.

Figure 5: Net interest-bearing debt relative to earnings before tax for CRE firms[1] with and without bond debt



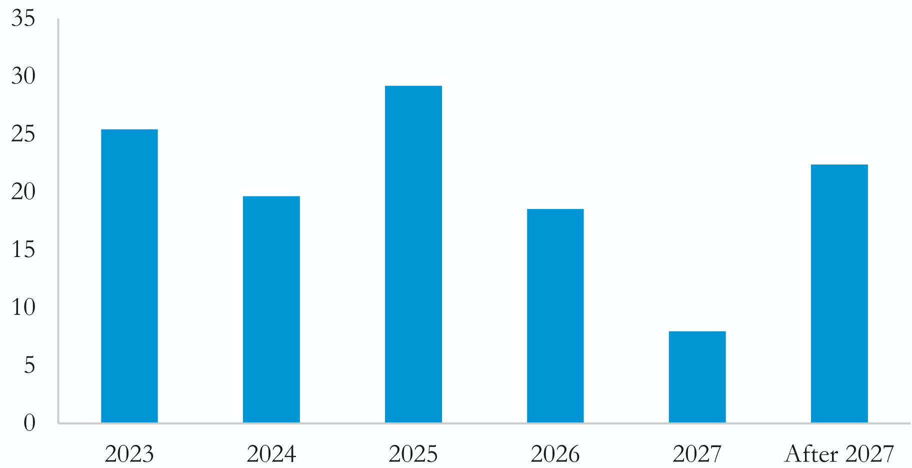
1.) Firms with more than NOK 250 million in interest-bearing debt

Sources: Dun & Bradstreet and Norges Bank

4.3 Refinancing risk in the bond market

We assess refinancing risk at firm level related to the bond debt on the basis of volume-weighted time to maturity and the share of bond debt maturing by the end of 2024. The volume-weighted time to maturity of all outstanding bond debt is just under 3 years. About one-third of the outstanding bond debt matures by 2024 (Chart 6).

Figure 6: Maturing bond debt. In NOK billions

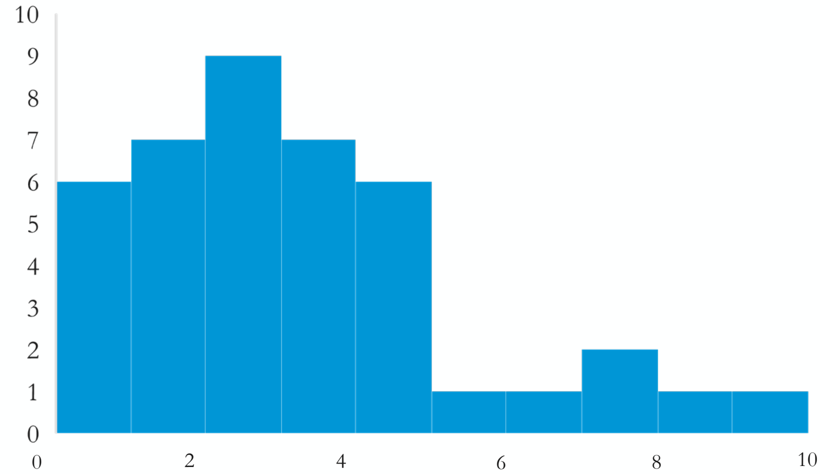


Source: Stamdata

The vast majority of firms have less than five years of volume-weighted maturity (figure 7). Overall, Entra ASA, Norwegian Property ASA and Thon Eiendom ASA have a 3.8-year volume-weighted time to maturity, while the rest of the firms in the sample have a combined 2.4 years volume-weighted time to maturity. The longer maturity of the largest firms may partly be due to their favorable liquidity and solvency situation, making it easier for them to gain access to more long-term funding. For about 20 percent of the firms, all bond debt matures by the end of 2024, while most firms do not have any bond debt maturing over the next couple of years (figure 8). [7]

[7] In the current situation, with rising interest rates and high credit premiums, a higher share of fixed rate loans would be a positive contribution to the financial situation of indebted firms. We have assessed indicators related to the share of fixed rate loans and the time to maturity for such loans. However, the inclusion of such criteria in the analysis has had little impact on our findings.

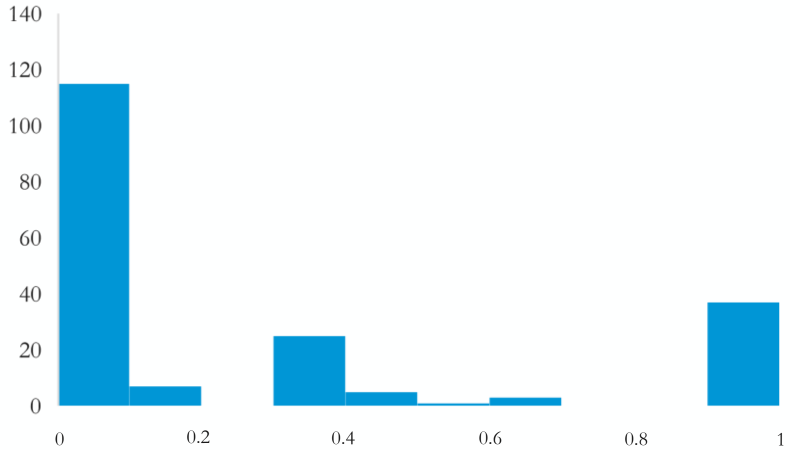
Figure 7: Number of firms[1] (vertical axis) by volume-weighted years to maturity for outstanding bond debt[2] (horizontal axis)



1.) Firms with more than NOK 300 million in bond debt
2.) Volume-weighted time to maturity is calculated for outstanding bond debt as of January 2023

Sources: Stamdata and Norges Bank

Figure 8: Number of firms[1](vertical axis) by share of outstanding bond debt maturing by the end of 2024 (horizontal axis). Percent



1.) Firms with more than NOK 300 million in bond debt

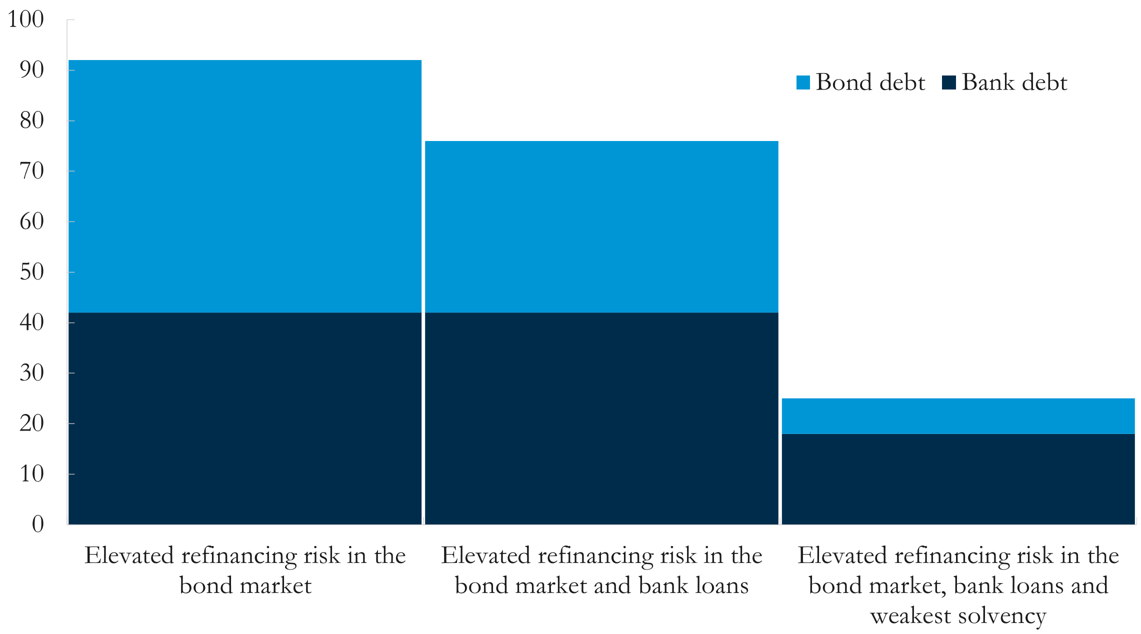
Source: Stamdata

We identify firms with elevated refinancing risk in the bond market if they meet at least one of the following heuristic criteria:

- The volume-weighted time to maturity of the firm's bond debt is shorter than 2.5 years
- The share of total outstanding bond debt of the firm maturing by the end of 2024 is above 40 percent

According to these simple criteria, NOK 50 billion of the bond debt is in firms with elevated refinancing risk (figure 9). This accounts for just under a third of the total outstanding bond debt. The share of bond debt with high refinancing risk held by firms with a low credit rating is 63 percent. For firms that do not have an elevated refinancing risk according to the criteria, the share of firms with a low credit rating is 34 percent. In addition, a number of the firms we capture have reported liquidity challenges over the past six months.

Figure 9: Distribution of corporate bond and bank debt based on simple risk criteria[1]. NOK billion



1.) Firms with more than NOK 300 million in bond debt

Sources: Dun & Bradstreet, Finanstilsynet, Stamdata and Norges Bank

Based on the ENGA exposure database, we find that NOK 16 billion of the bond debt in firms with ele refinancing risk is in CRE firms with loans from Norwegian banks of less than NOK 25 million (figure 9). We also find that banks have NOK 42 billion in exposure to firms with elevated refinancing risk in the bond market. This represents just under 10 percent of Norwegian banks' total exposure to the industry, which was about NOK 490 billion by the end of 2021.

In the next step, we identify CRE firms with both elevated refinancing risk in the bond market and weakest financial strength. We classify firms with an equity ratio below 25 percent in 2021 at group level among firms with the weakest solvency. We find that NOK 7 billion of the bond debt is held by CRE firms with bank debt, elevated refinancing risk and weakest solvency[8] (figure 9). Banks' exposure to such firms is NOK 16 billion, which is about 3 percent of their total exposure to the industry. However, the banking sector may be affected indirectly by firms that are struggling to refinance their bond debt. Such firms may have to proceed to fire sales of properties in order to strengthen their financial position, which in turn may weaken market prices and increase the credit risk associated with banks' CRE loans.

[8]We apply this criterion to firms that carry properties at historical cost in their accounts. This accounting principle, which most CRE firms use, means that buildings are carried at the transaction value of the latest transaction. In periods of rising market prices, equity stated in the accounts will then be lower than if market value had been applied. For firms that carrt properties at market value in their accounts, the criterion is set at 35 percent.

Bond debt in Swedish CRE firms

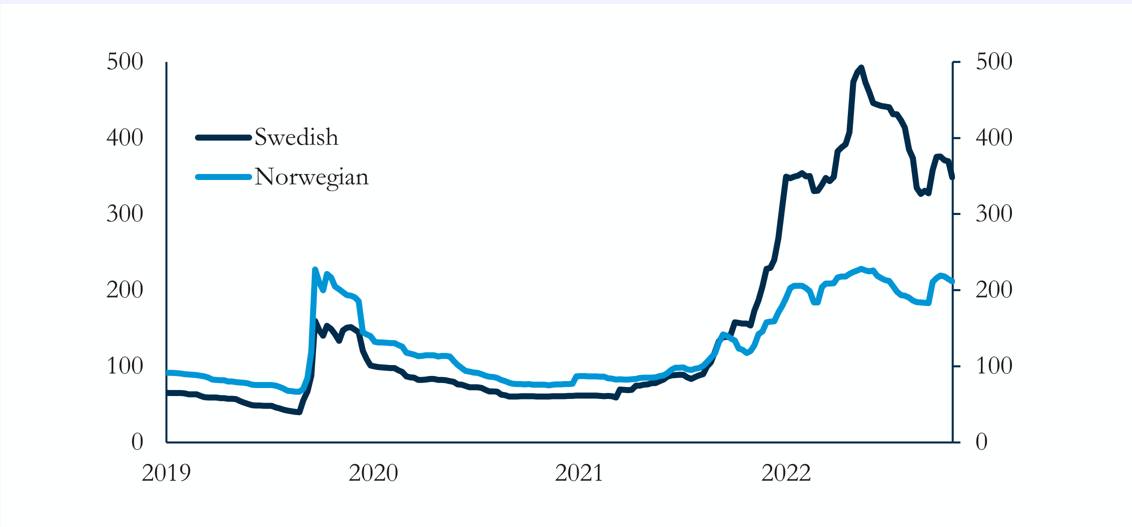
Several of the Nordic banks have substantial exposures to Swedish CRE firms. Credit premiums for several of the large Swedish CRE firms have been high over the past year (figure 10). In spring 2023, the large real estate firms Samhallsbyggnadsbolaget i Norden AB (SBB) and Fastighets AB Balder were downgraded by the rating agencies Moody's and SP Global Ratings respectively from high to low credit ratings.

Since the financial crisis, wholesale funding has become an increasingly important source of funding for Swedish CRE firms. In 2021, bond debt accounted for about 40 percent of debt financing for Swedish CRE firms. The corresponding percentage for Norwegian CRE firms was just below 20 percent.

Debt financing for Swedish CRE firms is more extensive for Norwegian CRE firms. In 2021, bank and bond debt for Swedish CRE firms was 42 percent in relation to GDP, while debt to Norwegian CRE firms was 23 percent in relation to mainland Norway GDP.

In the coming years, much of the bond debt will fall due to Swedish CRE firms. Sveriges Riksbank has emphasised that well-functioning corporate bond markets are important for the real estate sector's access to credit (see Sveriges Riksbank (2022)). The Riksbank has also pointed out that the real estate sector has become more interconnected in recent years. This makes the sector less transparent and more vulnerable to negative shocks.

Figure 10: Unweighted average of indicative credit premiums over three-month Nibor for five-year bonds issued in NOK by selected large CRE firms. Basis points



Source: Nordic Bond Pricing

5 Resilience to higher interest expenses

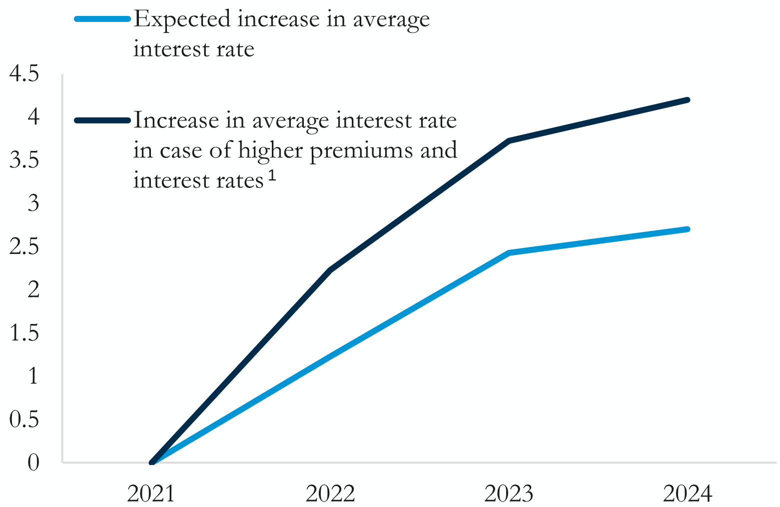
Higher interest rates and higher credit premiums will gradually be phased into CRE firms' financing costs. Union lending surveys indicate that CRE firms have fixed interest rates on about half of their bank debt. Developments in both short-term and long-term interest rates are therefore important for developments in financing costs. Higher credit premiums normally only affect cash flows when debt is refinanced.

We calculate developments in future financing costs for a typical CRE firm with a good credit rating from 2021 onwards (see the assumptions for the calculation in Appendix A.2). In 2022, the calculated average interest rate will increase by 1.2 percentage points (figure 11). By comparison, the average interest rate of Entra, which is the largest participant in the office market, increased by 1.45 percentage points in 2022.[9] This supports the view that our estimated interest rate series provides a good indication of the actual increase in interest expense in 2022 for some CRE firms. Overall, the average interest rate increases by 2.7 percentage points in the projection period, which is until 2024. For many firms, this will entail more than a doubling of interest expenses over the period.

There are wide differences in maturity profile, leverage and use of interest hedges across CRE firms, and the increase in interest rates will therefore affect firms differently. In addition, credit premiums may increase considerably more for firms with a weak financial position. We perform a sensitivity exercise where both credit premiums and interest rate sizes remain 1 percentage point higher than in the previous exercise. The average interest rate will then rise by 4.2 percentage points during the projection period.

[9]See Entra ASA annual report for 2022.

Figure 11: Increase in the calculated average interest rate from 2021 for a typical CRE firm with a good credit rating. Percentage points



1.) For this path, we assume that both interest rates and credit premiums remain one percentage point higher than expected.

Sources: Thomson Reuters, Union and Norges Bank

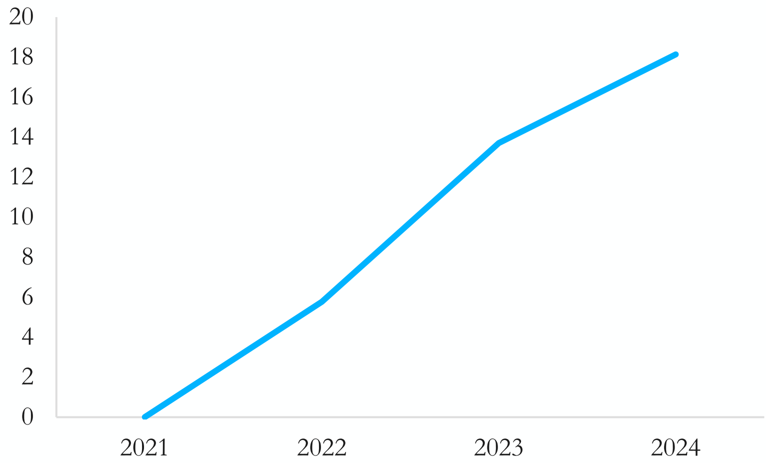
Rental income is the first line of defence against increased financing costs. Based on consolidated financial statements from 2021, we find that all else equal total rental income to the industry must increase by 19 percent to correspond to an increased average interest rate of 2.7 percentage points.

Rental income depends on developments in market rents and rents from existing contracts. Most of the available information on rental prices is for offices located in large cities, and about half of banks' exposure is to the office segment (Bjørland et al. 2022). The vast majority of office rents on signed contracts are adjusted in line with consumer price inflation. This helps protect CRE firms' debt-servicing capacity in periods of high inflation. Strong labour market developments have contributed to positive real growth in office rents in recent years.[10] This signifies that many new contracts could be concluded at a higher nominal rental level in the coming years, even in the event of a slight fall in market rents.

[10]See Norges Bank (2023) for a discussion of rental price developments over the past couple of years.

We calculate the expected future development in rental income from 2021 for a typical CRE firm that rents out offices in Oslo (see assumptions for the calculation in Appendix A.3). Estimated rental income will grow by just under 20 percent from 2021 to 2024 (figure 12). However, several downside risks associated with developments in future rental income exist (see discussion in Norges Bank (2023)). In the event of an economic downturn, rental income growth may become weak as a result of falling market prices and defaults on leases.

Figure 12: Increase in estimated rental income from 2021 for a typical CRE company that rents out offices in Oslo. Percent



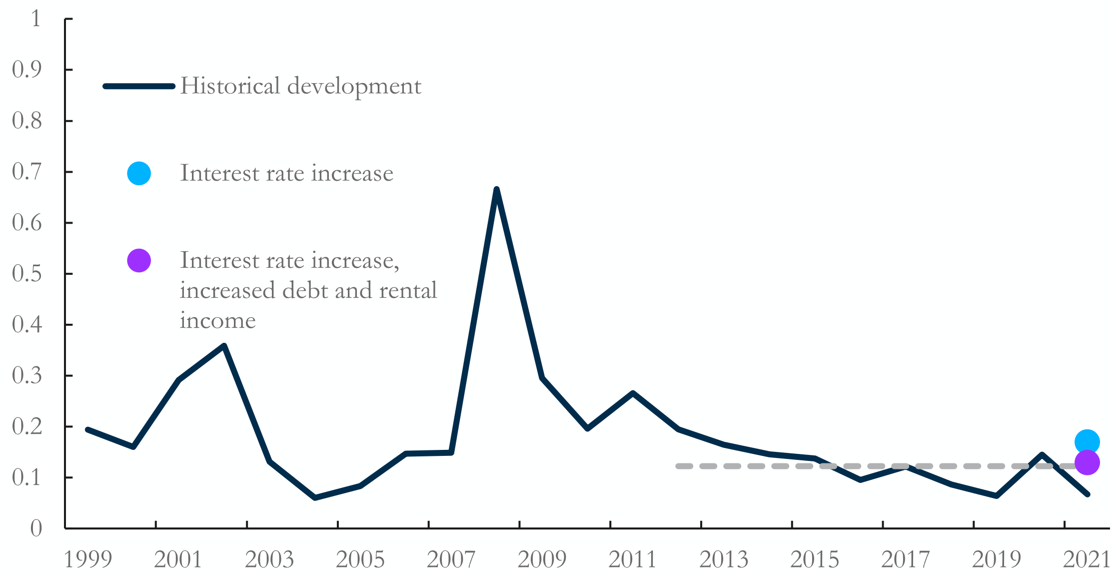
Sources: Arealstatistikk and Norges Bank

In the next step, we perform simple cash flow analyses for CRE firms based on consolidated financial statements and our calculated paths for rental income and interest expenses. Profitability in CRE has been solid in recent years. In 2021, only 7 percent of CRE firms' total interest-bearing debt was in firms with negative profit before tax (figure 13). By comparison, this share was about 60 percent during the financial crisis in 2008-2009.[11] A simple sensitivity exercise reveals that 17 percent of CRE firms' debt will be held by CRE firms that are unable to meet a 4 percentage

[11] An important driver of the industry's negative profitability during the financial crisis was probably write-downs of properties recorded at fair value. Write-downs themselves do not affect cash flows.

point increase [12] in average interest rates with current profitability from 2021 (figure 13). If we also take into account the estimated increase in debt levels and rental income over this period, the share of debt in CRE firms with a negative result will be 13 percent. This is approximately on a par with the historical average for the past 10 years.

Figure 13: Share of debt in firms with negative profit before tax.[1] Percent



1.) In the sensitivity exercises, the increase in average interest rates from the 2021 level is 4 percentage points, and the increase in debt levels and rental income is 20 percent and 19 percent, respectively, from 2021 levels.

Source: Norges Bank

6 Conclusion

Refinancing risk in CRE has increased over the past year. In this paper, we have used a broad set of data sources to assess the refinancing risk of CRE firms and their ability to meet increased financing costs.

[12] Here we have assumed a larger increase in interest expenses than is expected to be experienced by a typical CRE firm with a good credit rating in the next few years (see discussion above).

Increased use of bond debt spreads the credit risk associated with CRE loans from banks to other participants in the financial system. At the same time, bond debt may be a less stable source of funding than bank funding in turbulent times. Cheaper funding in the bond market relative to bank funding is probably an important reason behind the fact that CRE firms have increased their bond debt considerably over the past decade. Low returns on the safest securities and stricter capital requirements on banks' longer-term corporate loans may have contributed to reducing the cost of bond funding relative to bank funding.

CRE firms with bond debt generally have a weaker debt-servicing capacity than firms with only bank debt. Based on microdata regarding bond funding and Norwegian banks' corporate exposures, we find that banks have modest exposure to CRE firms elevated refinancing risk in the bond market and with the weakest solidity. However, challenges associated with refinancing in the bond market may drive fire sales of properties, which in turn may weaken market prices and increase credit risk associated with the banks' CRE loans. Many CRE firms will probably experience higher rental income in the years ahead as a result of strong developments in the rental market over the past couple of years and because the vast majority of the existing office leases are adjusted in line with consumer price inflation. Simple sensitivity exercises indicate that most CRE firms will be able to cover the increase in financing costs out of current profitability during the years ahead.

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A Appendix

A.1 Calculation of developments in credit premiums on bond loans relative to bank lending margins

We calculate developments in the difference between credit premiums on new bond and bank loans. Premiums on new bond loans are calculated as indicative credit premiums on unsecured five-year loans from large Norwegian real estate firms[13] with a high credit rating in the bond market. Premiums on new bank loans are calculated by the company Union and reflect lending margins on five-year bank loans with low credit risk.

A.2 Projections of financing costs

We project financing costs for a typical CRE company with a good credit rating. We assume a 50 percent share of fixed rate loans and that five-year swap rates are used as an interest rate hedging instrument. We use three-month Nibor projections from Monetary Policy Report 1/23 (Norges Bank (2023)) as projections for future floating interest rate developments, and we calculate future developments in five-year swap rates based on estimated forward rates as of May 5, 2023.[14] The estimates for the lending margin are based on developments in the calculated lending margin in Union's bank surveys[15]. Finally, we assume that one-third of the debt matures each year and that all maturing debt is refinanced.

A.3 Projections of rental income

When projecting rental income for a typical CRE firm, we assume that the leases have a maturity of 5 years and that all expired contracts are renewed at market rents. As a technical assumption, we assume zero growth in real market rents in 2023 and 2024. Furthermore, we assume that the rent on all concluded contracts is adjusted in line with consumer price inflation. CPI projections are from Monetary Policy Report 1/23 (Norges Bank (2023)) and information on historical

[13] Olav Thon Eiendomsselskap ASA, Thon Holding AS, Obos ASA, Entra ASA, Steen and Strøm ASA and Bane NOR ASA are included in this selection.

[14] We disregard any term premiums in this calculation. Term premiums are probably fairly small and therefore have little bearing on our illustrative exercise.

[15] For 2022, the lending margin in our calculations will increase as much as the estimated lending margin for new five-year loans with low credit risk in Union's bank surveys. In 2023 and 2024, we make a technical assumption of unchanged lending margins.

developments in average office rental prices are provided by the company Arealstatistikk.